#### LINCOLN CITY/LANCASTER COUNTY PLANNING STAFF REPORT

## for October 1, 2003 PLANNING COMMISSION MEETING

P.A.S.: Special Permit #2027

**PROPOSAL:** To allow a 148' monopole for wireless facilities.

**LOCATION:** Approximately one-half mile south of the intersection of South Folsom

Street and Old Cheney Road.

**WAIVERS:** A waiver to the fall zone was originally requested, however the request

has been withdrawn and the site plan will be revised to comply with this

requirement.

**LAND AREA:** The lease area is approximately 1,520 square feet in area.

**CONCLUSION:** With the revisions to the site plan noted in the recommendation, this

request complies with the requirements of the Zoning Ordinance and the

intent of the Comprehensive Plan.

RECOMMENDATION: Conditional Approval

#### **GENERAL INFORMATION:**

**LEGAL DESCRIPTION:** Lot 11, Irregular Tract, in the northeast quarter of Section 15, T15N, R9E, of the 6<sup>th</sup> P.M., Lancaster County, NE.

**EXISTING ZONING:** AG Agriculture **EXISTING LAND USE:** Agriculture

#### SURROUNDING LAND USE AND ZONING:

North: Agriculture AG
South: Agriculture/Residential AG
East: Agriculture AG
West: Agriculture AG

**HISTORY: CPA#03019** - The Comprehensive Plan was amended in July, 2003 to add designations for a community center and light industrial center on the property adjacent to the south of this site. Community centers are defined by the Plan as varying in size, but typically ranging between 300,000 to 500,000 square feet in area. The Plan recommends that Light industrial centers be a minimum of 50 acres in size, with larger planned centers preferred.

#### **COMPREHENSIVE PLAN SPECIFICATIONS:**

**Page F25** - The 2025 Comprehensive Plan's Land Use Plan (as amended July, 2003) designates urban residential land uses in this area, but also includes designations for a community center and a light industrial center in the vicinity of this site.

Page F126 - Wireless Telecommunications - The placement and construction of such facilities need to occur in a way that is compatible with the natural and built environment. Taller, more intensive facilities should be located in commercial and industrial areas. Facilities in residential areas should be unobtrusive, of a scale consistent with the neighborhood setting, and sited in a way that does not detract from the enjoyment of the neighborhood by its residents.

**TOPOGRAPHY:** The land is rolling farmland in this area. This site is approximately located at the top of a hill, and the land generally falls off in all directions.

**TRAFFIC ANALYSIS:** The proposed site is located at the midpoint between Old Cheney Road and West Denton Road, on South Folsom Street. Old Cheney Road and South Folson Street are designated as minor arterial streets. West Denton Road is designated a principal arterial street.

#### **ANALYSIS:**

#### STANDARDS FOR EVALUATION:

#### **Conformity with Comprehensive Plan.**

1. The Comprehensive Plan designates urban residential land uses in this area, with a community center and light industrial center designated on land adjacent to the south. This request is consistent with the type of development recommended by the Land Use Plan for rural areas as it is located away from developed residential areas, sited near existing power poles, and utilizes existing trees as screening to the extent possible.

#### Preference of site location in accordance with Section 10.008.

2. There are three location preferences as follows:

#### A. Preferred Location Sites:

(1) Publicly owned sites on which personal wireless facilities can be unobtrusively located with due regard to visibility, aesthetic issues, traffic flow, public safety, health and welfare. Such sites may include locating on existing buildings, co-locating on existing towers, screened roof-top mounts, water towers, billboards, electric substations, or other camouflaged sites, but shall not include new towers.

- (2) Privately owned sites with existing structures on which personal wireless facilities can be unobtrusively located with due regard to visibility, aesthetic issues, traffic flow, public safety, health and welfare. Such sites may include locating on existing buildings, co-locating on existing towers, screened rooftop mounts, water towers, billboards, electric substations, or other camouflaged sites, but shall not include new towers.
- (3) Publicly owned sites in which the facility is minimally obtrusive, has a minimal impact on the surrounding area, is an appropriate distance from residential land uses, has minimal impact on residential uses, with due regard being given to the scale of the facility and the surrounding area and the impact on the location.
- (4) Sites in commercially or industrially zoned districts in which the facility is minimally obtrusive, has a minimal impact on the surrounding area, is an appropriate distance from residential land uses, has minimal impact on residential uses, with due regard being given to the scale of the facility and the surrounding area and the impact on the location.
- B. Limited Preference Sites, in order of priority:
  - (1) Sites on other public property.
  - (2) Sites on other commercially or industrially zoned property.
  - (3) Screened antennas on multi-family residential structures exceeding 30' in height.
  - (4) Camouflaged structures with minimal impact on residential land uses.
- C. Sensitive Location Sites. Sites located in areas with residential uses, environmentally sensitive areas, Capitol View Corridors, the Capitol Environs District, entryway corridors, downtown, landmarks or landmark districts, properties listed or eligible to be listed on the National Register of Historic Places, the Airport Environs, and other sensitive areas. The applications for personal wireless facilities which are located at sensitive sites will be required to demonstrate a technical need to locate a personal wireless facility at a sensitive site and that other reasonable alternatives do not exist for the facility at a location which is not a sensitive site.

This application is considered a sensitive location site, as it does not meet the criteria of A or B above, and agricultural areas such as where this facility is to be located have residential uses. In sensitive location sites, the applicant is required to demonstrate what good faith efforts were taken to locate at a preferred or limited preference site, and why a preferred or limited preference site was not used if available.

There are five existing wireless facilities visible from this site and were identified by staff as potential sites for collocation. As required for sensitive sites, the applicant had to demonstrate that collocation on existing facilities was not feasible. The applicant evaluated those sites and provided the analysis that shows those sites are not feasible. That report is attached. Additionally, the analysis shows that all the sites are in excess of one-half of a mile away, the distance established as a general requirement (LMC 27.68.120d) for separation between wireless facilities.

#### Compatibility with abutting property and land uses.

3. This site and surrounding lands are zoned AG and used for agricultural purposes. There is a residence located approximately 350' to the south on the adjacent property. A waiver to the fall zone was originally requested, but has since been withdrawn. The applicant has since stated the site plan will be revised showing a minimum setback from the property lines of 74'. This complies with the fall zone requirement and the setbacks of the AG district. Except for the compound area and driveway, the area around the tower can still be put to productive agricultural use.

#### Adverse impacts such as visual, environmental or noise impacts.

4. The facility is sited at the southwest corner of the tract near the top of a rise. In the attached letter, the applicant notes that this was done to locate it near the existing power poles, to use existing trees as screening, and to minimize the height. It minimizes the height of the facility because the further north or east it is sited, the taller it must be to provide adequate coverage to compensate for the drop in ground elevation.

However, staff is recommending that the facility be moved east on the site to a point where it is setback from the west property line approximately 300' (an approximate 2:1 setback to height ratio). This setback from the street will reduce the visual impact and provide a better sense of scale when viewed from South Folsom Street. It will also allow enough area to accommodate future development, such as a commercial pad site and an access roadway, between the facility and South Folsom Street.

The applicant also states that the antennas to be mounted on the facility will be a flushmount design to reduce the visual impact. This is a good antenna design feature that should be made a condition of this permit and made applicable to all antennas that may locate on the facility.

#### Availability of suitable existing structures for antenna mounting.

5. Because this site is a Sensitive Location Site, the applicant was required to eliminate all other possibilities for collocation. As noted previously, the applicant provided an analysis that considered five other facilities in the area. There are no other potentially suitable structures.

#### Scale of facility in relation to surrounding land uses.

6. Compatibility of scale is partially provided by proximity to existing power poles. The amount of separation between the proposed facility and surrounding uses also acts as a mitigating factor.

Impact on views/vistas and impact on landmark structures/districts, historically significant structures/districts, architecturally significant structures, landmark vistas or scenery and view corridors from visually obtrusive antennas and back-up equipment.

7. This site is not within a Capitol View Corridor or located within a historic district. There is no other significant impact noted.

#### Color and finish.

8. The proposed facility will have a galvanized finish consistent with Section 27.68.110(c). No lighting is proposed.

#### Ability to collocate.

9. The applicant states that the facility is designed to accommodate two additional carriers as required by the Zoning Ordinance.

Screening potential of existing vegetation, structures and topographic features, and screening potential of proposed facilities, ground level equipment, buildings and tower base.

10. The applicant is showing 13 trees of an acceptable species planted around the compound near the base of the tower. These trees provide in excess of a 70% screen from the ground to 8' in height, where more than half the trees are also required to grow to a mature height of 35' or more.

Evidence of good faith efforts, and demonstration that a preferred or limited preference site was not technically, legally, or economically feasible.

11. As noted previously, the applicant evaluated the existing facilities in the area and eliminated them from consideration. With the exception of the other towers that were not suitable for collocation, there are no other preferred or limited preference sites in the area.

#### **CONDITIONS:**

#### Site Specific:

1. This approval permits a 148' tall wireless facility capable of accommodating at least three wireless carriers consistent with the revised site plan.

#### General:

- 2. Before receiving building permits:
  - 2.1 The permittee shall complete the following instructions and submit the documents and plans to the Planning Department for review and approval.
    - 2.1.1 A revised site plan including 5 copies showing the following revisions:
      - 2.1.1.1 The correct scale on all the reduced plan sheets.
      - 2.1.1.2 The setback from the property line to the equipment shelter, which must be in excess of 50'.
      - 2.1.1.3 The monopole setback no less than 74' from the south property line, and approximately 300 from the west property line.
      - 2.1.1.4 The parking area relocated out of the front yard.
      - 2.1.1.5 A signed surveyor's certificate.
      - 2.1.1.6 A note stating that all antennas mounted on the facility must of a flush-mount design.
  - 2.2 The construction plans shall comply with the approved plans.

2.3 The permitted shall submit a surety approved by the City Attorney in an amount adequate to guarantee the removal of the facility.

#### Standard:

- 3. The following conditions are applicable to all requests:
  - 3.1 Before use of the facility all development and construction shall have been completed in compliance with the approved plans.
  - 3.2 All privately-owned improvements shall be permanently maintained by the owner.
  - 3.3 The site plan accompanying this permit shall be the basis for all interpretations of setbacks, yards, locations of buildings, location of parking and circulation elements, and similar matters.
  - 3.4 This resolution's terms, conditions, and requirements bind and obligate the permittee, its successors and assigns.
  - 3.5 The applicant shall sign and return the letter of acceptance to the County Clerk within 30 days following the approval of the special permit, provided, however, said 30-day period may be extended up to six months by administrative amendment. The clerk shall file a copy of the resolution approving the special permit and the letter of acceptance with the Register of Deeds, filling fees therefor to be paid in advance by the applicant.

#### Prepared by:

Brian Will, AICP
Planner
September 18, 2003

**APPLICANT**: Alltel

1440 M Street Lincoln, NE 68508

**OWNER:** David Beynon

PO Box 82226

Lincoln, NE 68501-2226

**CONTACT:** Mike Healy

The Everest Group

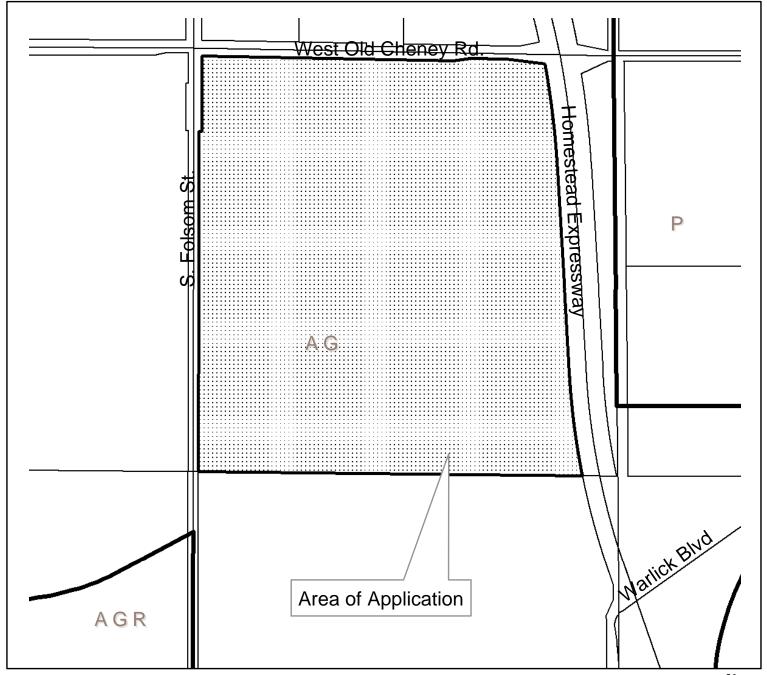
268 North 115<sup>th</sup> Street Suite 4

Omaha, NE 68154



Special Permit #2027 S. Folsom & W. Old Cheney Rd.



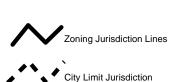


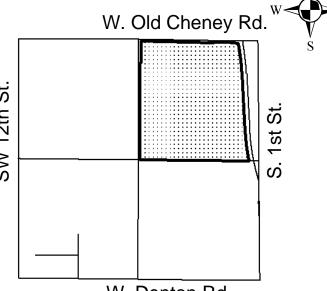
# Special Permit #2027 S. Folsom & W. Old Cheney Rd.

## **Zoning:**

R-1 to R-8Residential District ΑG Agricultural District AGR Agricultural Residential District R-C Residential Convervation District 0-1 Office District Suburban Office District 0-2 0-3 Office Park District Residential Transition District B-1 Local Business District Planned Neighborhood Business District B-2 B-3 Commercial District B-4 Lincoln Center Business District B-5 Planned Regional Business District H-1 Interstate Commercial District H-2 Highway Business District Highway Commercial District H-3 H-4 General Commercial District Industrial District

One Square Mile Sec. 15 T9N R6E



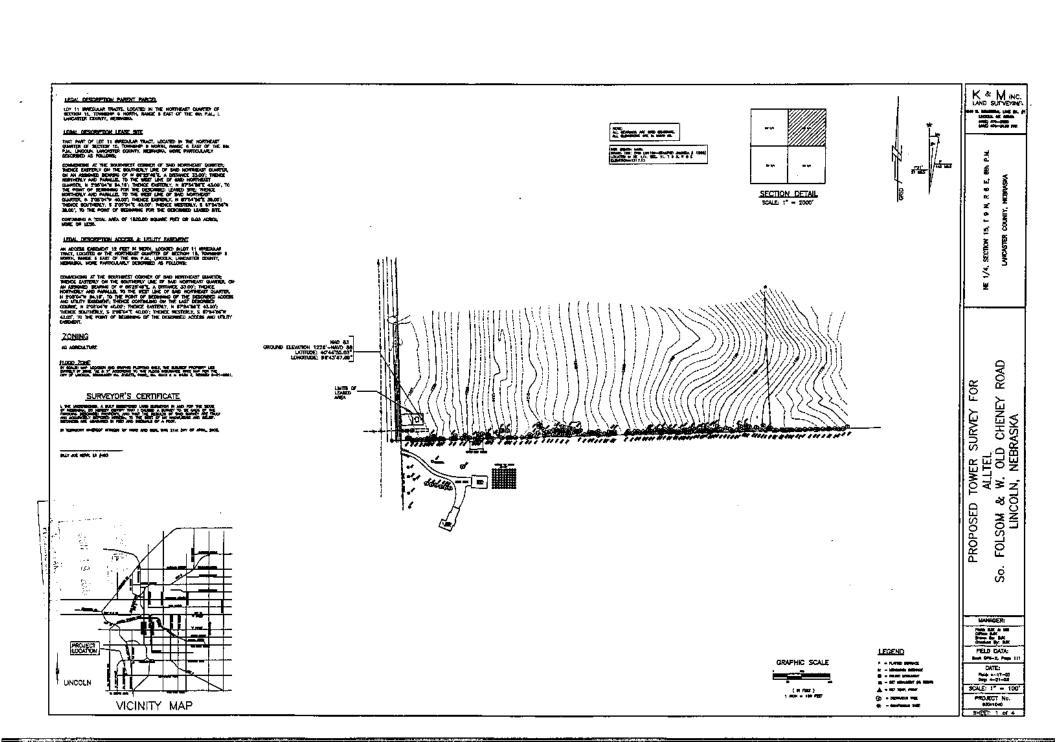


W. Denton Rd.

Industrial Park District Employment Center District Public Use District

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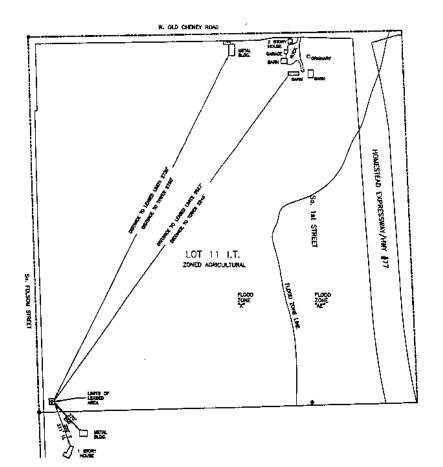
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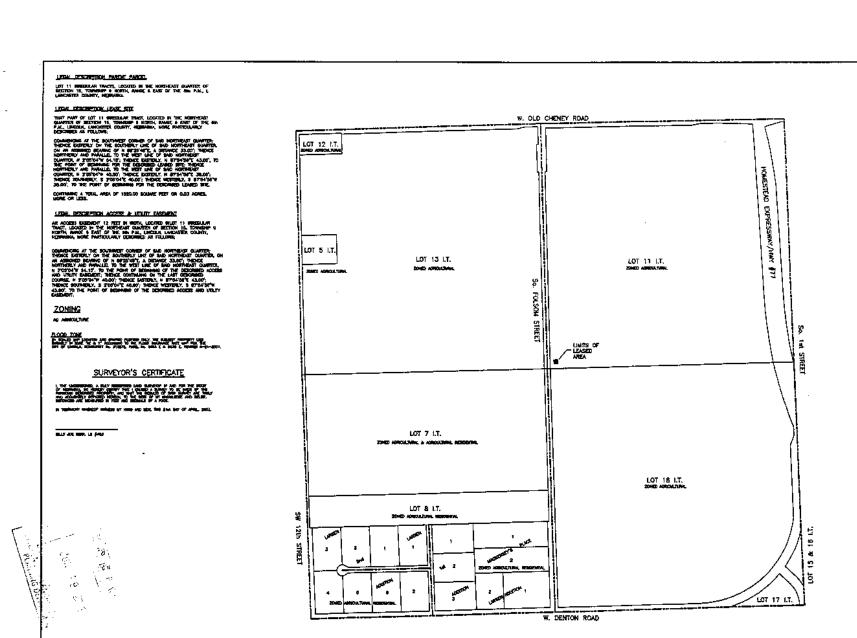
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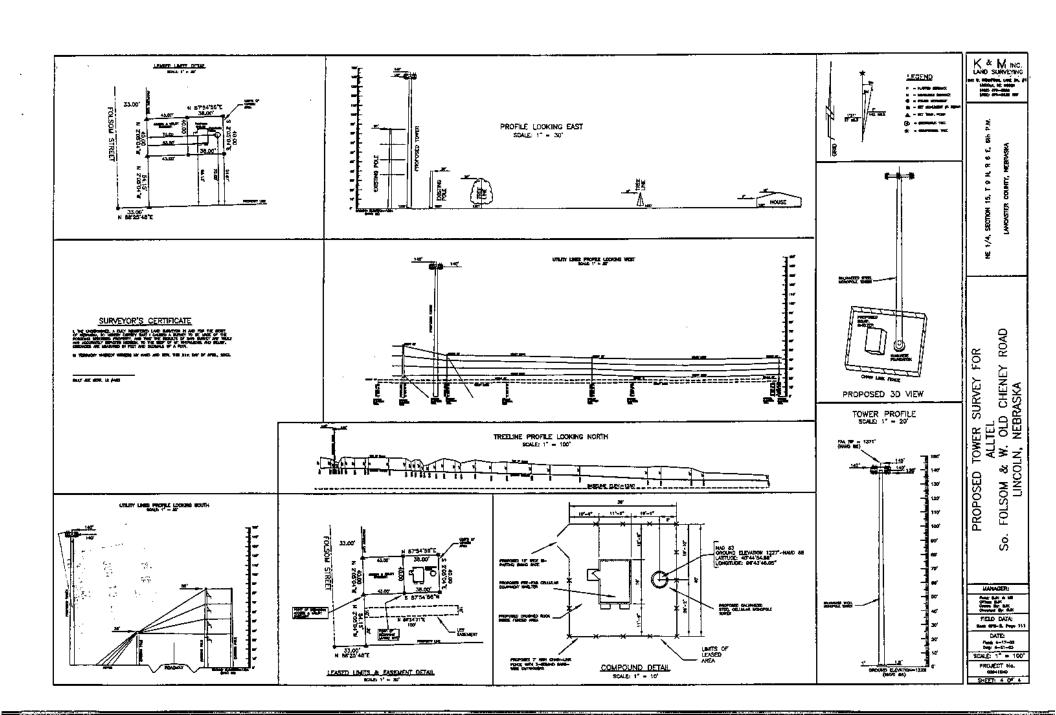
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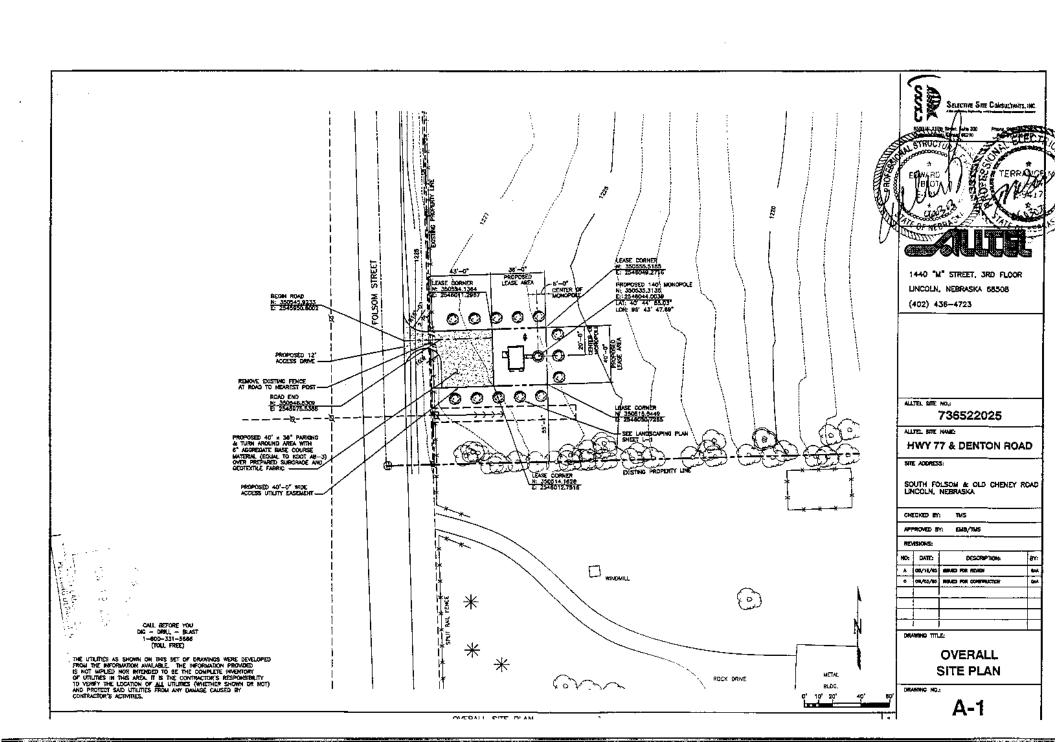
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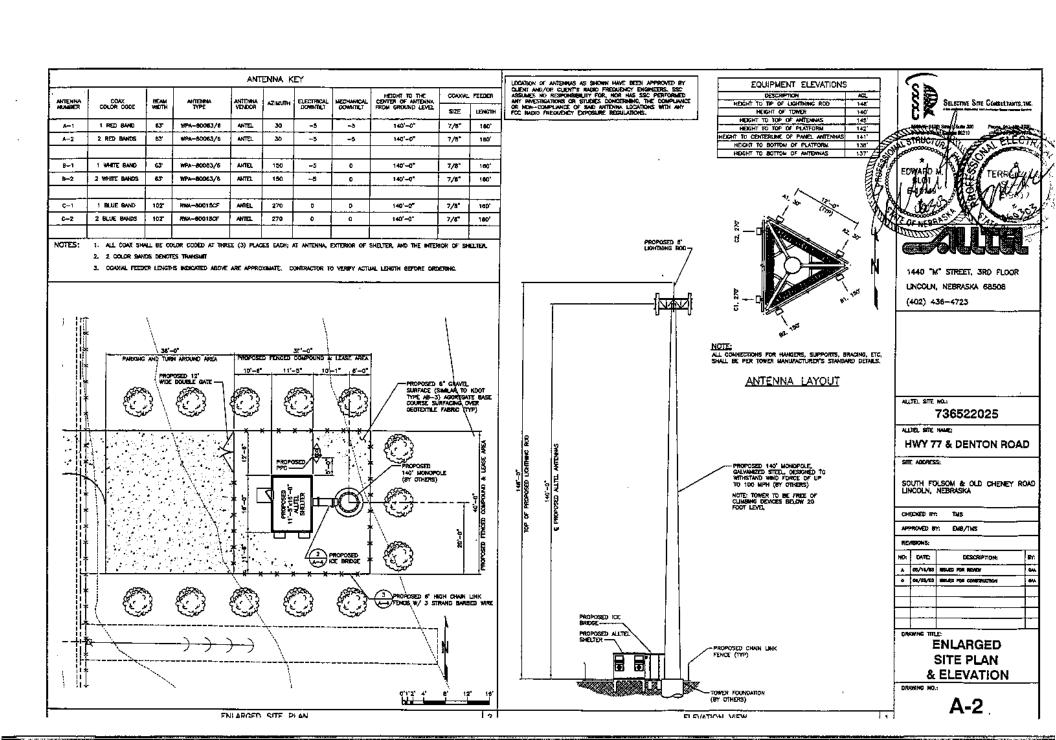
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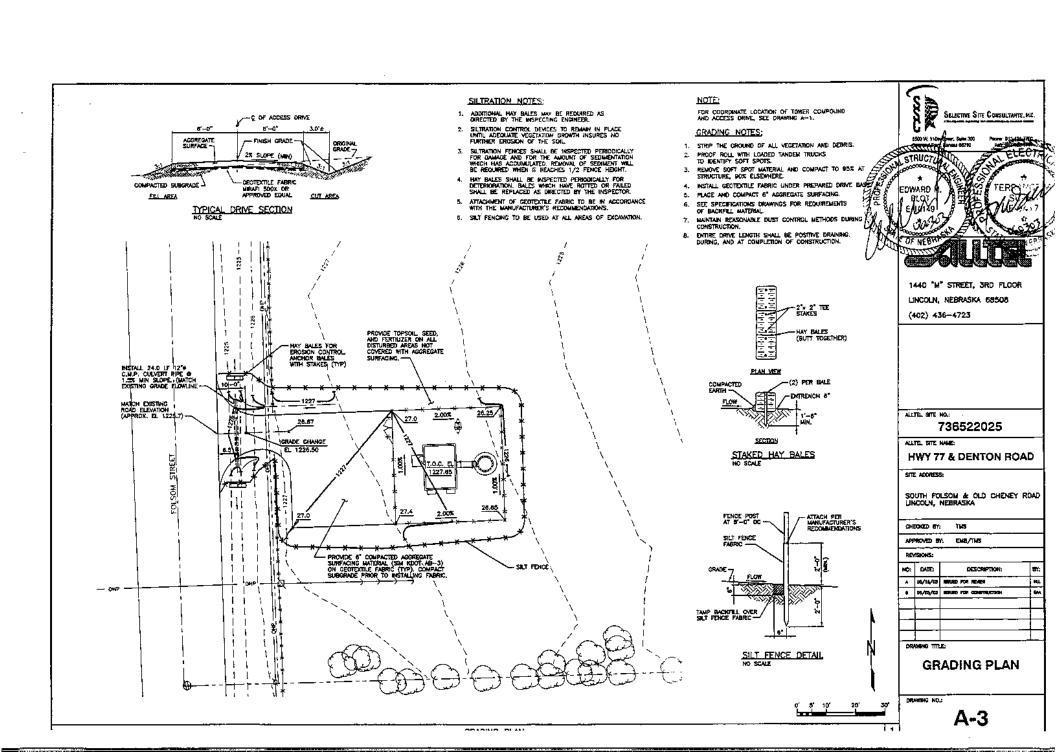
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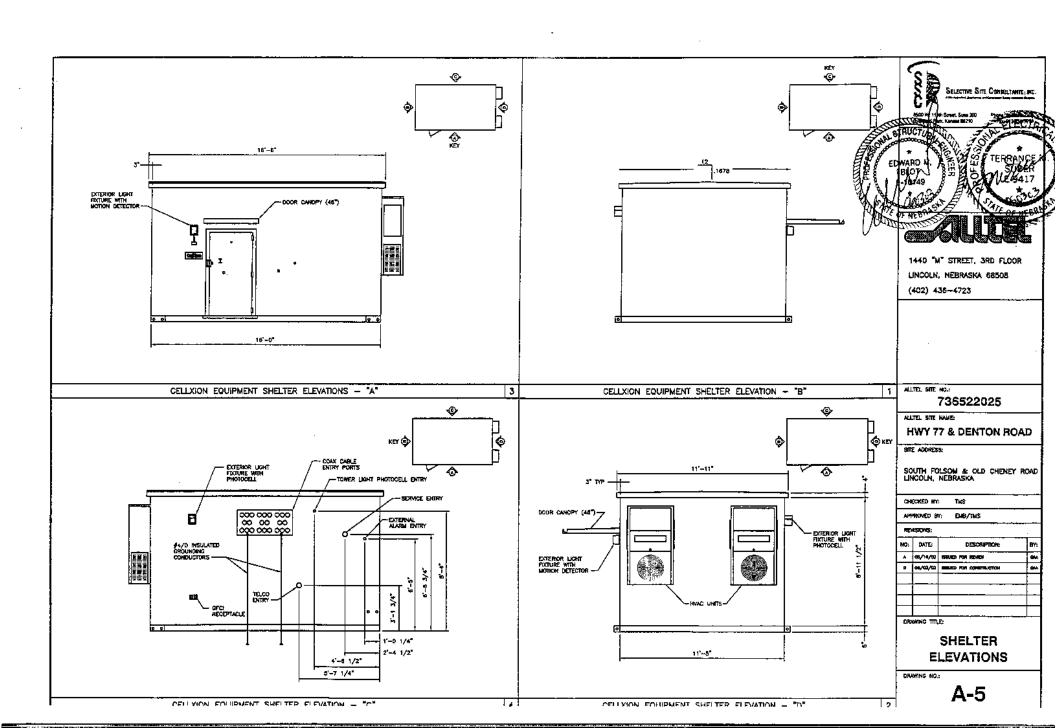
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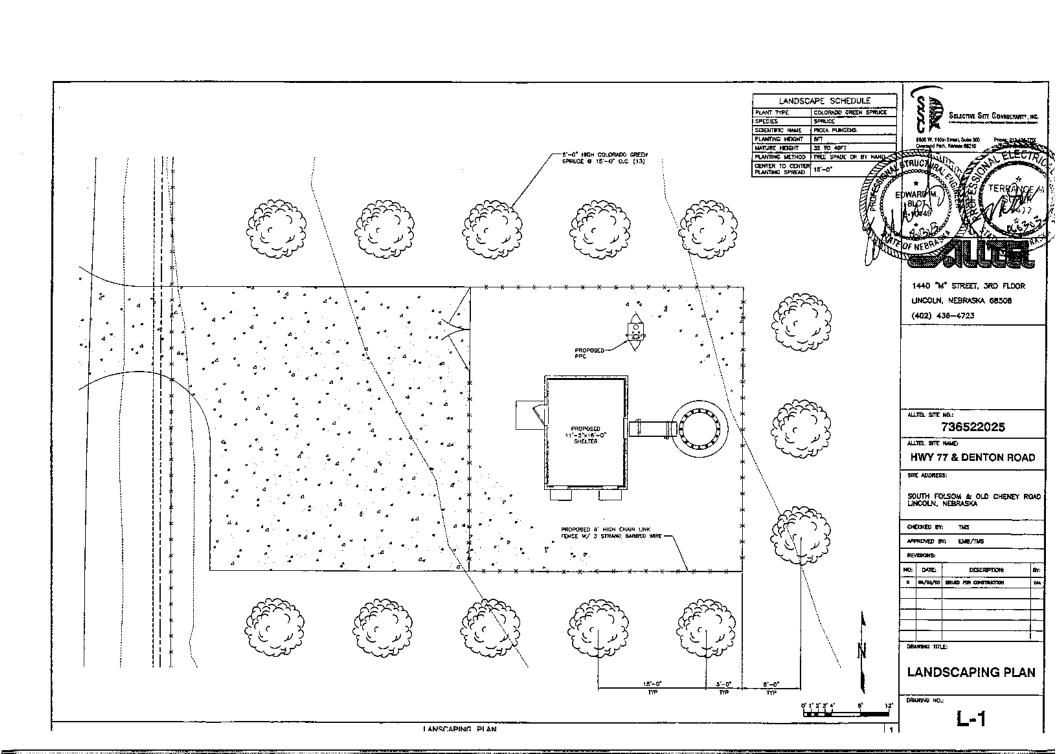














# "Mike Healy" <mhealy@tegilc.net>

09/11/2003 01:45 PM

To: "Brian Will" < bwill@ci.lincoln.ne.us>

cc:

Subject: Alltel Application - Folsom Road

Brian-

As we had discussed previously, I have asked Alltel's RF engineer to review the potential for collocation at any of the towers in the area surrounding our proposed site location. Attached please find his narrative that describes the reasons that each of these sites is unacceptable as a substitute for our proposed location on Folsom Road. Also attached are coverage maps that depict current coverage as well as predicted coverage if our proposed site on Folsom were on the air. The maps also show the surrounding towers (blue stars), as well as currently existing Alltel sites in the area (black triangles).

The alternate sites that I asked him to review are:

- 1) The water tank located to the north on Folsom Rd.
- 2) The red and white painted guyed tower located to the north, just east of Hwy. 77
- 3) The lattice tower at the NE Dept. of Roads facility on 14th St.
- 4) The guyed tower located at the NE State Penitentiary
- 5) The guyed tower located at the LES Rokeby Station
- 6) The sports complex property located to the north on Folsom (this would be a raw land site, but I asked him to review it because I know that you had previously mentioned this as a potentially preferable site location)

Please note that all of these locations are at least one mile away from our proposed site, which clearly complies with Section 27.68.120(d)of the zoning code, requiring a 1/2 mile separation from existing towers.

Furthermore, the attached documentation explains the ability of our proposed site to accomplish the objectives normally required of two sites. Utilization of one of these alternate towers would require an additional site in the area to accomplish the second set of objectives.

I hope that this information proves helpful. Please let me know if you have any questions or require additional documentation. Thank you for your attention to this matter.

Mike Healy The Everest Group, LLC 773/704-7065 (mobile)







After Current Narrative.doc



### "Mike Healy" <mhealy@teglic.net> 09/11/2003 02:26 PM

To: "Brian Will" < bwill@ci.lincoln.ne.us>

cc:

Subject: Alltel Application - Folsom Rd.

Brian-

I know that your other issue with this application involves the choice of location for this tower within the parent parcel.

As discussed in the application narrative, this location was chosen because of its four major attributes. They are:

- 1) the mature tree line to the south to provide screening;
- 2) the LES lines to the west to provide blending;
- 3) the higher ground elevation allowing for a shorter tower; and
- 4) the anticipated future use of this corner of the property for commercial development.

There is no other location on this property or in this general area that has all of these attributes. If the tower is moved to the east, it will no longer benefit from the close proximity to the LES lines. In addition, the decreasing ground elevation will necessitate a taller tower. The difference in elevation from our proposed location to an alternate location at the east end of the property near Hwy. 77 is 50'. Therefore, moving the site to this location would require a tower that is at least 50' taller than that which is being proposed.

If the tower is moved to the north, it will no longer be in an area that is anticipated to be developed for commercial uses in the future. In addition, it will no longer be screened by the mature tree line. Essentially, a site in this location will be out in the open, completely visible from all locations.

There is another, more practical problem with moving the site to the north or east on the property. The owner, David Beynon, will not lease these areas to Alltel. Understandably, he is concerned about possibly inhibiting his options for future development of the property. A tower in the corner of the property allows for much more development flexibility in the future than does one that is in a more centralized location on the property.

Finally, I certainly understand the concern regarding the proximity of the proposed site to the house located to the south. However, according to the County's Register of Deeds, that property, as well as that entire parcel has been owned by Pine Lake Heights Joint Venture, LLP since April of 2003. It is my understanding that they intend to develop that property for commercial and industrial uses and initiated the effort to have it designated as a CI district for future land uses. If the owners of that house intend to develop their property for commercial and industrial use, I cannot believe that our proposed site will interfere in any way with their use or enjoyment of the property.

I hope that this adequately explains why we believe that we have chosen the

best location for our proposed site. If you have any questions or require additional information, please let me know. Thank you for your attention to this matter.

Mike Healy The Everest Group, LLC 773/704-7065 (mobile)

# ALLTEL Highway 77/Denton Road Cell Site Alternate Location RF Engineering Evaluation

#### Overview

The Hwy 77/Denton road site has two objectives for ALLTEL. (Also, see objective map)

- 1. To remove cellular traffic from the existing site 406 at 27<sup>th</sup>/O.C. Road (sector three). Offloading site 406 sector 3 is important because it is regularly overloaded causing missed calls and poor quality during busy hours. To successfully remove mobile call traffic from 406 \$3 it is important to place the offloading site (Hwy 77/Denton) such that mobile calls will originate/terminate on the new site while at the same time not establishing a radio path to the offloaded site 406. To achieve this the new site must be located near a substantial portion (30-60 percent) of the current/future traffic that now is using the site 406 (from 2 Kilometers out west of site 406).
- To provide continuous mobile coverage to traffic along Denton road between Lincoln and Denton. This objective is accomplished by placing the site such that it will fill a 5.7 miles coverage gap along Denton road between Lincoln and our site 429 near Denton.

Balancing these two objectives is both important and possible. Our current location is expected to accomplish this admirably.

In this narrative, I will evaluate the following alternate locations with respect to the above two objectives.

Here are the six locations proposed

Approx. 150' water tank
 40-46-27.2
 96-43-50.1

This location will meet neither of the objectives. It is to far from the mobile traffic objective area (at least 2 miles) to offload calls from site 406 S3 (objective #1), and is to far (3 or more miles) from the Denton Rd. coverage objective (#2). In addition this location is only .7 miles from our existing site 418. Placing a site to close to a neighbor site will cause the mobile traffic to use both sites in a call, which wastes our network capacity resources.

2 LES lattice tower (approx. 100') 40-43-54.5 96-44-22.5

I did a RF study for this location at 100 ft centerline antenna. The site does not meet the capacity officed of site 406 S3. Though it does provide signal in

80% of the area to be offloaded it is about 1 mile further from the objective area than site 406. This will cause mobiles to not "see" the new site as stronger and stay on site 406. Actually mobiles will use both cells for the call thus negating any call capacity gain. The site does meet the major requirement for cellular service in the objective area of Denton road but the current location meets this requirement better.

3. NE Dept. of Roads lattice tower (approx. 180')

40-45-36.6

96-42-09.0

This location will meet neither of the objectives. It is to close (.95 miles) to offload site 406 S3, wasting network call capacity and failing to offload the objective site. The location is to far (4 or more miles) from the Denton Rd. coverage objective to provide service there.

4. Red & White guyed tower (approx. 150' mounting height)

40-46-12.6

96-42-28.9

I did a RF study for this location at 140 ft centerline antenna. The site will miss more than 40% of the offloading objective due to lack of dominant signal strength provided in much of the desired call traffic offload area. The location also falls to provide reliable service to the desired vicinity of Denton road. In addition the location would cause interference and wasted network resources by providing signal to areas in Lincoln where it is not needed.

5. NE State Penitentiary tower (approx. 200' guyed tower)

40-45-36.7

96-41-55.7

This location will meet neither of the objectives. It is to close (.81 miles) to offload site 406 sector 3 wasting network capacity and failing to offload the sector. The location is also between sectors 1 and 3 of site 406. This will cause the mobile traffic to involve both of these sectors in a call using even more network resources. Also, the location is to far (4 or more miles) from the Denton Rd. coverage objective.

6. Sports Complex

40-45-39.7

96-43-46.0

I did a RF study for this location at 140 ft centerline antenna. The site will miss more that 50% of the offloading traffic objective due to lack of dominant signal strength provided to the desired call traffic offload area. In addition the location will cause interference to the existing network as well as waste capacity resources by putting too much signal strength where it is not needed. The location also fails to provide reliable service to at least 5 miles of the

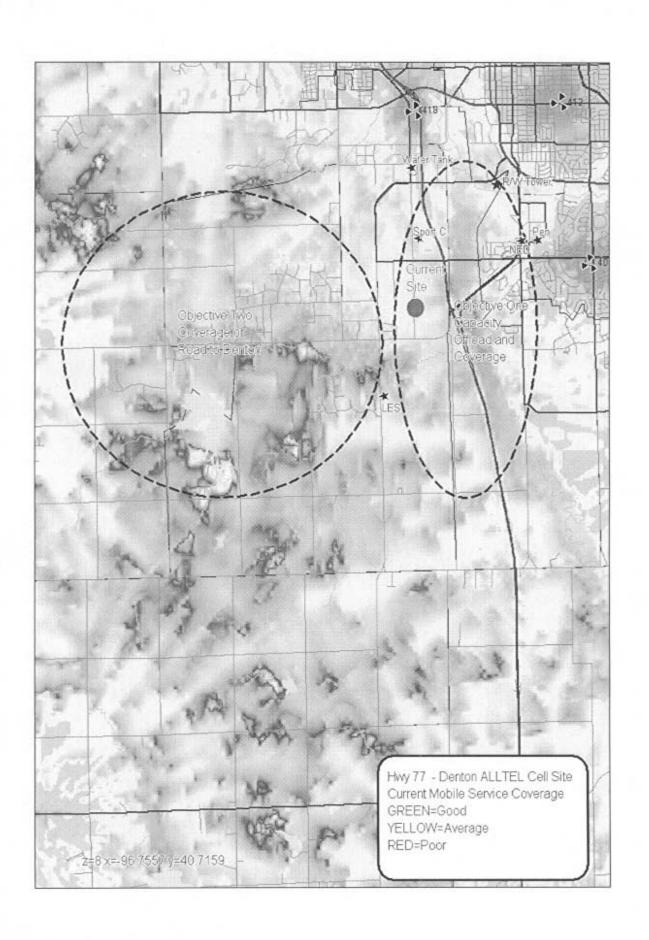
desired area on Denton road.

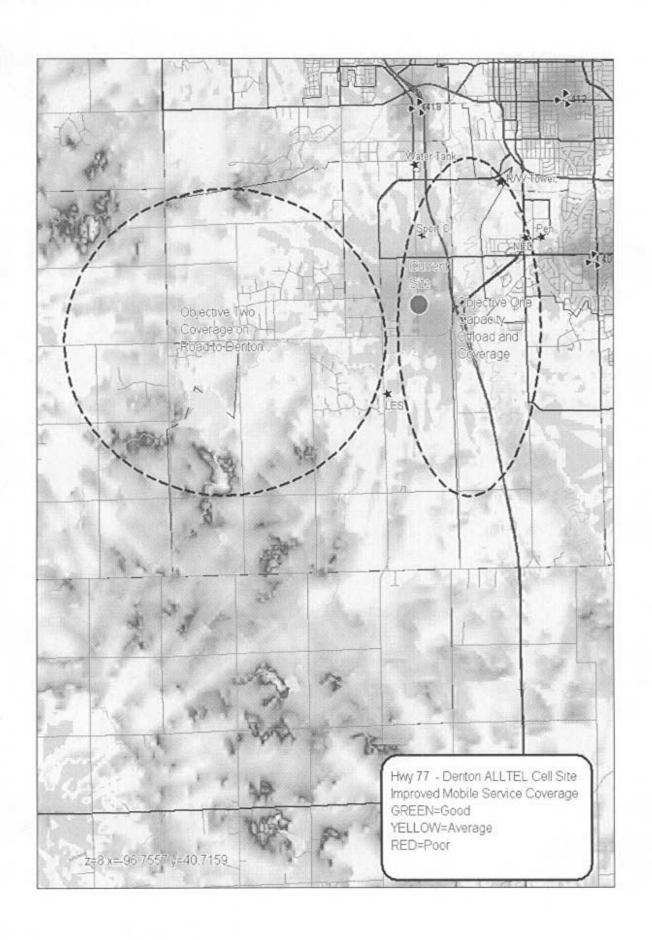
#### **Conclusion**

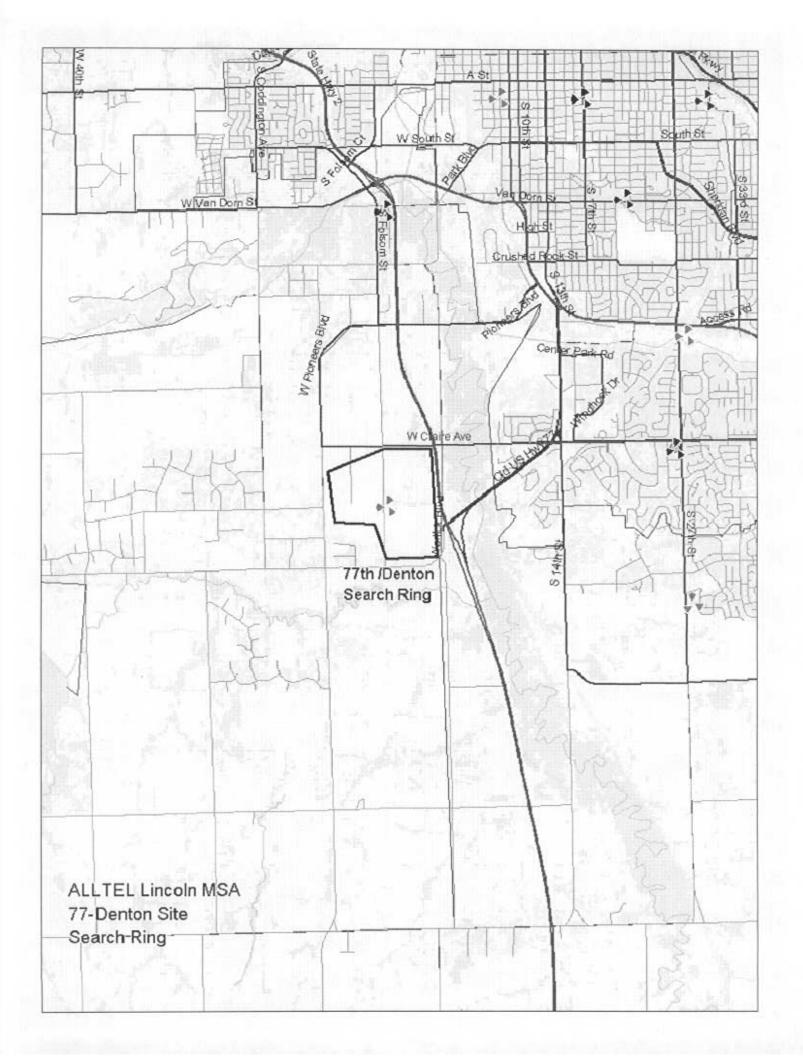
As can be determined from the above narratives, new cell site location for mobile telephone service can be a tricky business. The specific situation with Hwy 77/Denton Rd. site is one of the hardest to accomplish since ALLTEL wishes to make the best use of it capital dollars by resolving two customer-affecting issues with one site. Both objectives are important to our customer service and can be resolved with proper site placement. This does restrict site locations to specific areas that were determined and thus used to provide a "search ring" to our site acquisition consultant. I have studied the proposed alternate locations for Hwy 77/Denton Rd. and determined that none of the locations will meet the objectives for this site.

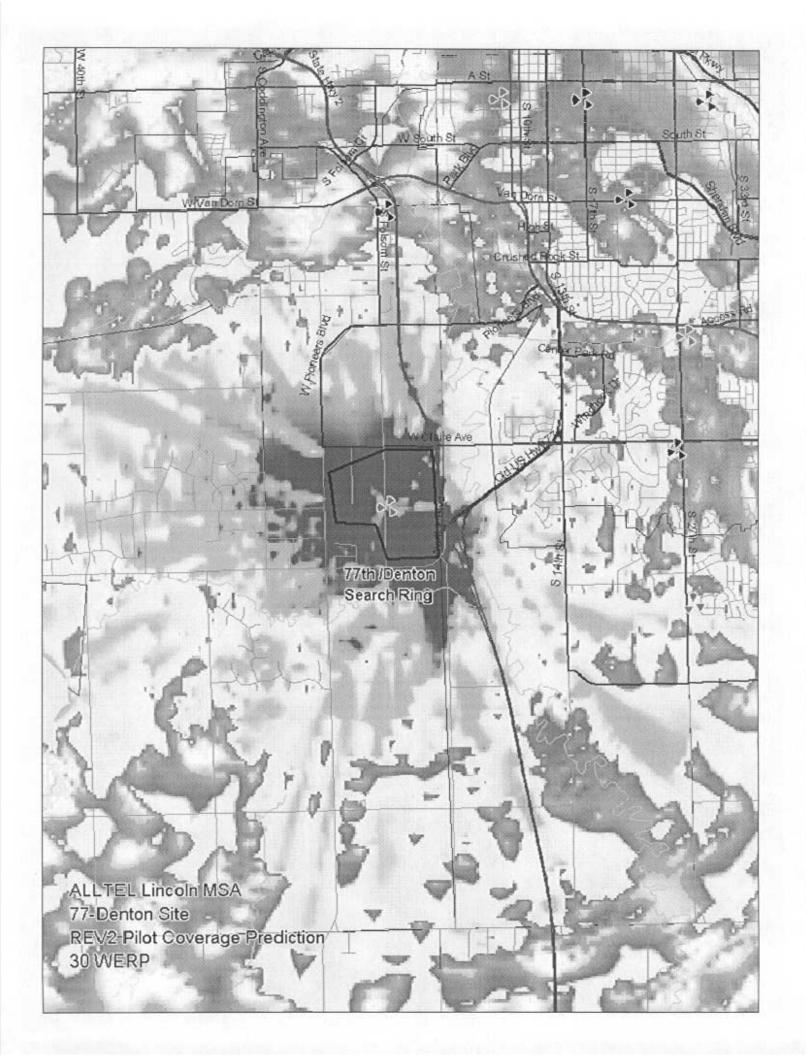
If there are questions concerning this narrative please contact me.

Regards, Scott Cashmore ALLTEL RF Engineer 602-914-5522









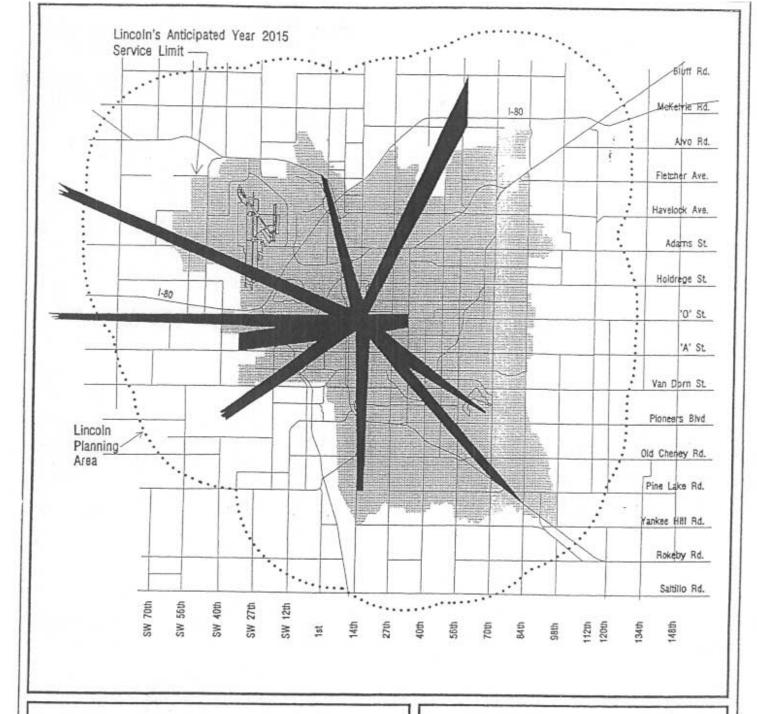


Figure 62

Capitol View Corridors:
City Perspective



Lincoln City/Lancaster County Comprehensive Plan

